RID 7629.02 Data Limitations Attachment 1

Corrections to data for wells currently being monitored as of 11/2010:

Aquarium City –The original GPS measurement was taken at ground level instead of top of casing, which is the actual measurement point. The depth-to-water measurement s from 5/9/05 to 4/24/06 were incorrectly adjusted by adding the wellhead stickup height (4 feet) before being entered into the database. The water level technician incorrectly thought that the adjustment was required to account for the wellhead casing stickup. The database calculations have been verified and entries have been corrected from 5/9/05 to 4/24/06

Doloris – A missing measurement of 84.46 ft on 2/4/00 was added to the database.

<u>Donna</u> – Missing measurements of 71.71 ft on 4/14/04, 74.51 ft on 6/23/04, 75.91 ft on 8/11/04, and 76.17 ft on 9/22/04 were added to the database.

<u>Farm 1B</u> - The incorrect measurement of 113.04 ft on 2/10/00 was corrected to 113.34 ft, and the incorrect date of 3/6/07 with a reading of 117.10 ft, at 15:20 hrs was corrected to 3/13/07. A missing measurement of 114.80 ft on 3/23/01 at 14:10 hrs was added to the database.

Gauging Station - An incorrect entry of 137.71 ft on 8/17/07 at 12:50 hrs was corrected to 137.77 ft.

<u>HWWT Gravel Pit</u> - The erroneous entry of 117.36 ft on 2/4/08 at 1453 hrs, caused by a number having been transposed on the date, was removed from the database.

Last Chance Well - A missing measurement of 556.14 ft on 11/28/06 at 15:15 hrs was added to the database.

Old Orchard Well - The incorrect entry of 107.03 ft on 6/22/04 at 12:05 hrs was corrected to 106.92 ft.

Stateline- The incorrect entry of 169.98 ft on 10/2/05 at 10:30 hrs was corrected to 170.98 ft.

<u>Stewart Valley Vacant</u>- Missing measurements of 18.55 ft on 9/16/03 at 15:20 hrs, and 18.65 ft on 10/14/03 at 16:15 hrs were added to the database. Early data for this well was being recorded under a different name, SV Vacant, and was copied over to the newer Stewart Valley Vacant well data file.

Winchester- The incorrect entry of 77.74 ft on 11/2/06 at 15:43 hrs was corrected to 76.74 ft.

Corrections to wells no longer being monitored as of 11/2010:

Adkisson - A missing measurement of 52.78 ft on 3/20/04 was added to the database.

AVPark - The incorrect date of 4/24/04 with a reading of 177.10 ft was corrected to 4/1/01.

AW33 - Missing measurements of 211.90 ft on 7/31/03 and 212.38 ft on 9/9/03 at 14:00 hrs were added to the database.

AW47 – A missing measurement of 52.78 ft on 3/20/04 was added to the database.

 $\underline{AW65}$ – Missing measurements of 65.11 ft on 7/2/03, 66.40 ft on 7/30/03, 67.12 ft on 9/12/03 at 13:55 hrs, and 67.44 ft on 10/3/03 at 11:50 hrs were added to the database.

AW67 - A missing measurement of 47.38 ft on 7/10/03 was added to the database.

 $\underline{AW69}$ – Missing measurements of 26.98 ft on 7/10/03, 28.29 ft on 8/6/03, 29.62 ft on 9/16/03 at 15:10 hrs, and 28.96 ft on 10/14/03 at 16:10 hrs were added to the database.

<u>Courtney</u> - Missing measurements of 57.12 ft on 7/13/03 and 57.38 ft on 10/6/03 at 11:25 hrs were added to the database.

<u>Debbie</u> – Missing measurements of 57.85 ft on 7/2/03, 58.05 ft on 7/30/03, 58.33 ft on 9/9/03 at 11:30 hrs, and 58.44 ft on 10/6/03 at 8:50 hrs were added to the database.

Deserae – A missing measurement of 66.75 ft on 7/2/03 was added to the database.

Fort Churchill - A missing measurement of 409.96 ft on 4/12/04 was added to the database.

 $\underline{\text{Hidden Hills}}$ – Missing measurements of 117.81 ft on 7/31/03, 117.95 ft on 9/15/03 at 16:00 hrs, and 117.96 ft on 10/6/03 at 16:02 hrs were added to the database.

LaComb Domestic - A missing measurement of 63.05 ft on 1/17/06 was added to the database.

Laurence - A missing measurement of 65.40 ft on 8/11/04 at 14:05 hrs was added to the database.

Marris - A missing measurement of 63.00 ft on 9/24/02 was added to the database.

Mesquite Artesian - A missing measurement of 22.10 ft on 8/13/04 was added to the database.

Nursery 1 - A missing measurement of 51.80 ft on 2/13/01 was added to the database.

<u>Spears</u> – Missing measurements of 102.75 ft on 7/9/03,103.02 ft on 9/16/03, and 103.27 ft on 10/14/03 at 9:25 hrs were added to the database.

 $\underline{\text{Wright}}$ – Missing measurements of 43.25 ft on 3/9/01, 47.44 ft on 9/15/03 at 13:30 hrs, and 47.46 ft on 10/6/03 at 10:55 hrs were added to the database.

All private wells being monitored by the NWRPO Water Level Measurement Program (WLMP) at the time of this submittal (11/2010), were resurveyed using a resource grade GPS unit (Trimble Geo XH with Trimble H-Star™ technology) which has a stated accuracy of 10 cm / 4 inches after post processing, and a vertical accuracy about 2 to 3 times the horizontal stated accuracy, for four reasons: 1) To correct well locations that were found to be in error. 2) To correct measurement point elevations being in error by a greater amount than the expected for the accuracy of the GPS unit used for the original surveys. 3) To increase accuracies of well locations where measurement points were obtained by using offsets from the actual GPS locations. 4) To obtain better horizontal and vertical accuracies for well locations and measurement point elevations than was previously possible using the previous GPS unit.

New wells that were added to the WLPM after 9/30/08 are also listed below along with the excepted accuracies of its coordinates. Latitudes and longitudes for all wells in the NWRPO Water Level Measurement Program are supplied using the NAD83 horizontal control datum. All wells currently being monitored at the time of this submittal (11/2010) were resurveyed with coordinates supplied using the NAD 83 (CONUS) datum, and the vertical height supplied using the (CONUS) GEOID09 height model. For more information and a list of all wells surveyed/resurveyed with the Trimble Geo XH see Rid 7792. Field forms used before the GPS resurveying (11/2010) will not show the updated Latitudes, longitude, and mp elevations, and the user is directed to use the well coordinates from the updated RGED V.4.0.mdb database. During the course of the resurveys/surveys, 3 NGS control points (Lathrop (PID GS0091), Pahrump NW Base (PID GS0851), and Junction (PID Gs0410)) were used a combined total of 15 times to verify the accuracy of the GPS derived coordinates for the well locations. The results of comparing the GPS measurements to the actual NGS reported locations indicate that the Latitudes/Longitudes had an average error of 0.157 ft and standard deviation (SD) of 0.1378 ft, and the elevations had an average error of -3.120 ft, SD of 0.374 ft. The source of the error in the elevations as compared to the NGS stated elevations has not been resolved. The water level elevations presented must be considered approximate because of the potential error in the GPS-based elevation of the land surface at the well site. The potential corrected elevation error for the original GPS location for older wells (no longer being monitored as of 11/2010) is listed in RID 5281 and ranges from 0.7 to 3.0 meters (2.3 to 9.8 feet). Current wells in the Water Level Measurement Program (11/20/10) have been resurveyed using a resource grade GPS unit. These wells are listed below, along with the Trimble® Pathfinder® Office estimated accuracies. The potential error does not affect the depth-to-water or the absolute change in water levels over time that may be calculated using the elevation datum for land surface. The potential error may, however, result in limitations in the use of these data for the calculation of hydraulic gradients between wells with the error induced in such calculations being inversely proportional to the distance between the two wells being used to perform the calculation.

Update Note 3/30/15: The above mentioned error associated with the processing of GPS locations has been fixed using Trimble® Pathfinder® Office version 5.60 (see RID 8182). The well locations and water level measurement data have been updated in this rid (RID 7629.02) to reflect these changes.

The following wells were resurveyed using a resource grade GPS unit due to either the original GPS locations having been found to be in error, or the wells having been originally located using only a WAAS enabled handheld GPS unit:

Ash Meadows Gauging Station –The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.33965000, -116.22416000, mp elevation of 2439.00 ft, stickup of 2.00 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.339639914, -116.224996234 (NAD83 (Conus)), mp elevation of 2431.17 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.60 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post

processed stated 68% horizontal accuracy for this data set is 80 mm, and stated 68% vertical accuracy is 88 mm. For more information, see the corrected survey file R080315A.cor in RID 8182.

AW74— The original location 36.27070927, -116.00200849, mp elevation of 2629.43 ft, stickup of 1.48 ft above ground level, was found to be in error and references a different well. The correct location 36.264275599, -116.004716357 (NAD83 (Conus)), mp elevation of 2634.60 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.90 ft above ground level, has been updated and incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 104 mm, and stated 68% vertical accuracy is 130 mm. For more information, see the corrected survey file R011215A.cor in RID 8182.

<u>Caltrans DVJ</u>— The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.30612000, -116.42210000, mp elevation of 2056.00 ft, stickup of 0.60 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.30611635, -116.422104699 (NAD83 (Conus)), mp elevation of 2052.94 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.95 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 80 mm, and stated 68% vertical accuracy is 80 mm. For more information, see the corrected survey file R080511A.cor in RID 8182.

<u>Doloris</u>— The original location 36.41077562, -116.42002515, mp elevation of 2169.39 ft, stickup of 0.97 ft above ground level, was found to be in error and references a different well. The correct location 36.409661096, -116.420530659 (NAD83 (Conus)), mp elevation of 2169.25 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.03 ft above ground level, has been updated and incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 81 mm. For more information, see

the corrected survey file R080512A.cor in RID 8182.

Eagle Mtn North—The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.21846000, -116.38009000, mp elevation of 1991.00 ft, stickup of 2.00 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.218511287, -116.38091566 (NAD83 (Conus)), mp elevation of 1997.61 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.29 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 84 mm, and stated 68% vertical accuracy is 105 mm. For more information, see the corrected survey file R031708A.cor in RID 8182.

Eagle Mtn South— The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.21845000, -116.38009000, mp elevation of 1991.00 ft, stickup of 1.40 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.218201812, -116.380669026 (NAD83 (Conus)), mp elevation of 1996.73 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.19 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 84 mm, and stated 68% vertical accuracy is 105 mm. For more information, see the corrected survey file R031708A.cor in RID 8182.

<u>Harrow Disk</u> – The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.26427000, -116.00415000, mp elevation of 2623.02 ft, stickup of 1.02 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.264279485, -116.00414059 (NAD83 (Conus)), mp elevation of 2635.27 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.02 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 114 mm, and stated 68% vertical accuracy is 130 mm. For more information, see the corrected survey file R011216A.cor in RID 8182.

<u>HWWT Gravel Pit</u>— The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.56905000, -116.61497000, mp elevation of 2373.00 ft, stickup of 1.20 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.569060646, -116.61496734 (NAD83 (Conus)), mp elevation of 2368.25 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.26 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 83 mm. For more information, see the corrected survey file R080513A.cor in RID 8182.

<u>Longstreet 1</u>– The original location 36.41320303, -116.42669872, mp elevation of 2152.80 ft, stickup of 0.45 ft above ground level, was found to be in error and references a different well. The correct location 36.412250469, -116.424688622 (NAD83 (Conus)), mp elevation of 2156.63 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.70 ft above ground level, has been updated and incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 78 mm, and stated 68% vertical accuracy is 120 mm. For more information, see the corrected survey file R010714A.cor in RID 8182.

<u>Longstreet 2</u>— The original location 36.41322092, -116.42790322, mp elevation of 2152.80 ft, stickup of 0.45 ft above ground level, was found to be in error and references a different well. The correct location 36.41284030, 116.424627061 (NAD83 (Conus)), mp elevation of 2157.90 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.50 ft above ground level, has been updated and incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 58 mm, and stated 68% vertical accuracy is 95 mm. For more information, see the corrected survey file R010714A.cor in RID 8182.

NDOT South— The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.00430000, -115.60413000, mp elevation of 4204.00 ft, stickup of 0.25 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.004296963, -115.604081211 (NAD83 (Conus)), mp elevation of 4220.03 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.25 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 109 mm, and stated 68% vertical accuracy is 142 mm. For more information, see the corrected survey file R011213A.cor in RID 8182.

<u>Sec 10</u>– The original well location of 36.56921955, -116.43645068, mp elevation of 2440.06 ft, stickup of 0.85 ft above ground level, has been replaced with a more accurate updated location of 36.569226388, -116.436457012 (NAD83 (Conus)), mp elevation of 2441.27ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.20 ft above ground level. The offset used is -0.67 feet vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 124 mm, and stated 68% vertical accuracy is 128 mm. For more information, see the corrected survey file R031613A.cor in RID 8182.

<u>Trout Canyon</u>— The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.16282000, -115.70399000, mp elevation of 5260.00 ft, stickup of 1.33 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.162818002, -115.703991313 (NAD83 (Conus)), mp elevation of 5259.90 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.03 ft above ground level. These changes have been incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 82 mm. For more information, see the corrected survey file R011214A.cor in RID 8182.

The following wells were resurveyed using a resource grade GPS unit due to the previously stated elevation of the measurement points being in error by a greater amount than expected for the accuracy of the original GPS unit being used for these surveys (Trimble Pathfinder Pro XRS):

<u>DV Junction Well</u> – The original location 36.30449748, -116.41390106, mp elevation of 1947.72 ft, stickup of 0.82 ft above ground level, has been replaced with a more accurate updated location of 36.304502339, -116.41391364 (NAD83 (Conus)), mp elevation of 2042.09 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.69 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 79 mm, and stated 68% vertical accuracy is 82 mm. For more information, see the corrected survey file R061708A.cor in RID 8182.

<u>Franklin PVC Well</u> – The original location 36.42527923, -116.46342145, mp elevation of 2099.20 ft, stickup of 1.59 ft above ground level, has been replaced with a more accurate updated location of 36.425279459, -116.463441024 (NAD83 (Conus)), mp elevation of2189.54 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.56 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 103 mm, and stated 68% vertical accuracy is 153 mm. For more information, see the corrected survey file R060115B.cor in RID 8182.

HWY 127 MM21 #1 – The original location 36.06039106, -116.29738751, mp elevation of 1643.50 ft, stickup of 1.38 ft above ground level, has been replaced with a more accurate updated location of 36.060399996, -116.297399711 (NAD83 (Conus)), mp elevation of 1735.71 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.42 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 124 mm, and stated 68% vertical accuracy is 134 mm. For more information, see the corrected survey file R060114A.cor in RID 8182.

HWY 127 MM21 #2 – The original location 36.06053931, -116.29774250, mp elevation of 1643.21 ft, stickup of 1.30 ft above ground level, has been replaced with a more accurate updated location of 36.060551909, -116.297755826 (NAD83 (Conus)), mp elevation of 1737.62 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.41 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 127 mm, and stated 68% vertical accuracy is 130 mm. For more information, see the corrected survey file R060114B.cor in RID 8182.

The following wells were resurveyed using a resource grade GPS to correct for well locations where measurement points required applying offsets to determine the actual well locations. Horizontal and vertical accuracies may be less than those reported below, due to additional errors associated with manual distance and angle measurements used in applying these offsets, and are proportionate to length of the offset used.

Aquarium City— The original well location of 36.19780088, -115.97274910, mp elevation of 2714.13 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.197789164, -115.972747226 (NAD83 (Conus)), mp elevation of 2716.25 ft (NAD 83-Geiod09, US Survey Feet), stickup of 4.58 ft above ground level. The offset used is 13.07 ft, with a 127° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 77 mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R032210A.cor in RID 8182.

<u>AVUSP</u> – The original well location of 36.52600145, -116.42042111, mp elevation of 2340.13 ft, stickup of 1.87 ft above ground level, has been replaced with a more accurate updated location of 36.526005591, -116.420432936 (NAD83 (Conus)), mp elevation of 2343.72 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.05 ft above ground level. The offset used is 6.60 ft, with a 179° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 110 mm. For more information, see the corrected survey file R031710A.cor in RID 8182.

AW10- The original location 36.27748937, -116.02311561, mp elevation of 2609.12 ft, stickup of 0.52 ft above ground level, was found to be in error and references a different well. The correct location 36.278199887, -116.023693493 (NAD83 (Conus)), mp elevation of 2609.85 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.65 ft above ground level, has been updated and incorporated into the database. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 94 mm, and stated 68% vertical accuracy is 146 mm. The offset used is 1.00 ft, with a 194° azimuth. For more information, see the corrected survey file R022309A.cor in RID 8182.

<u>AW46</u>– The original well location of 36.13162152, -115.98869586, mp elevation of 2612.76 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.131628119, -115.988716984 (NAD83 (Conus)), mp elevation of 2620.33 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.20 ft above ground level. The offset used is -0.04 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 99 mm, and stated 68% vertical accuracy is 124 mm. For more information, see the corrected survey file R060907B.cor in RID 8182.

AW70– The original well location of 36.31753840, -116.02296399, mp elevation of 2659.90 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.317541619, -116.022990697 (NAD83 (Conus)), mp elevation of 2664.86 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.45 ft above ground level. The offset used is 0.33 ft, with a 257° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 83 mm. For more information, see the corrected survey file R072714A.cor in RID 8182.

Beyond Sherry's— The original well location of 36.06782135, -115.95744990, mp elevation of 2583.79 ft, stickup of 0.45 ft above ground level, has been replaced with a more accurate updated location of 36.067829281, -115.957458554 (NAD83 (Conus)), mp elevation of 2580.47 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.42 ft above ground level. The offset used is 0.26 ft, with a 34° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 100 mm. For more information, see the corrected survey file R032909B.cor in RID 8182.

<u>Chicago</u> – The original well location of 36.00566869, -116.17771210, mp elevation of 2106.85 ft, stickup of 0.20 ft above ground level, has been replaced with a more accurate updated location of 36.005660219, -116.177721877 (NAD83 (Conus)), mp elevation of 2103.10 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.30 ft above ground level. The offset used is -0.72 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 94 mm, and stated 68% vertical accuracy is 94 mm. For more information, see the corrected survey file R060914A.cor in RID 8182.

<u>Crystal Fire</u>— The original well location of 36.48783462, -116.16980555, mp elevation of 2386.77 ft, stickup of 0.83 ft above ground level, has been replaced with a more accurate updated location of 36.487847891, -116.169850905 (NAD83 (Conus)), mp elevation of 2386.89 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.51 ft above ground level. The offset used is 9.68 ft, with a 235° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 119 mm, and stated 68% vertical accuracy is 138 mm. For more information, see the corrected survey file R031713A.cor in RID 8182.

East IMV Road— The original well location of 36.46822349, -116.37914180, mp elevation of 2185.65 ft, stickup of 4.42 ft above ground level, has been replaced with a more accurate updated location of 36.468233072, -116.379154466 (NAD83 (Conus)), mp elevation of 2183.74 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.00 ft above ground level. Note: stickups were entered manually into the RGED database for this well. The offset used is -0.08 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 103 mm. For more information, see the corrected survey file R031709A.cor in RID 8182.

<u>Farm 1B</u>– The original well location of 36.56820996, -116.58701152, mp elevation of 2372.89 ft, stickup of 0.14 ft above ground level, has been replaced with a more accurate updated location of 36.568211466, -116.587023104

(NAD83 (Conus)), mp elevation of 2372.55 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.75 ft above ground level. The offset used is -0.59 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 148 mm, and stated 68% vertical accuracy is 149 mm. For more information, see the corrected survey file R031613B.cor in RID 8182.

<u>Floyd Farm Basin</u>— The original well location of 36.21936043, -116.02365630, mp elevation of 2590.08 ft, stickup of 0.75 ft above ground level, has been replaced with a more accurate updated location of 36.219365434, -116.023675855 (NAD83 (Conus)), mp elevation of 2585.49 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.71 ft above ground level. The offset used is 0.19 ft, with an 84° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 79 mm, and stated 68% vertical accuracy is 81 mm. For more information, see the corrected survey file R081115A.cor in RID 8182.

<u>Grafitti Well</u>– The original well location of 36.25321349, -116.09834050, mp elevation of 2581.89 ft, stickup of 0.80 ft above ground level, has been replaced with a more accurate updated location of 36.25319423, -116.098386585 (NAD83 (Conus)), mp elevation of 2585.35 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.89 ft above ground level. The offset used is 28.03 ft, with a 226° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 98 mm. For more information, see the corrected survey file R032211B.cor in RID 8182.

Hidden Hills Irrigation Well— The original well location of 36.01480173, -115.85771120, mp elevation of 2810.48 ft, stickup of 0.80 ft above ground level, has been replaced with a more accurate updated location of 36.014800911, -115.857735339 (NAD83 (Conus)), mp elevation of 2814.72 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.63 ft above ground level. The offset used is -0.19 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 160 mm, and stated 68% vertical accuracy is 145 mm. For more information, see the corrected survey file R032912A.cor in RID 8182.

Keystone— The original well location of 36.19119242, -116.01262720, mp elevation of 2596.43 ft, stickup of 0.40 ft above ground level, has been replaced with a more accurate updated location of 36.191188689, -116.012633105 (NAD83 (Conus)), mp elevation of 2600.38 ft (NAD 83-Geiod09, US Survey Feet), stickup of -0.50 ft below ground level. The offset used is 0.33 ft, with a 34° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 88 mm, and stated 68% vertical accuracy is 114 mm. For more information, see the corrected survey file R032908A.cor in RID 8182.

LaComb Irrigation – The original well location of 36.21242630, -116.05922650, mp elevation of 2544.59 ft, stickup of 0.40 ft above ground level, has been replaced with a more accurate updated location of 36.212423936,

-116.05925325 (NAD83 (Conus)), mp elevation of 2552.70 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.41 ft above ground level. The offset used is 0.10 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 101 mm, and stated 68% vertical accuracy is 105 mm. For more information, see the corrected survey file R060814B.cor in RID 8182.

North Leslie – The original well location of 36.30714933, -116.04172030, mp elevation of 2642.84 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.307151934, -116.041730689 (NAD83 (Conus)), mp elevation of 2634.63 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.39 ft above ground level. The offset used is 1.74 ft, with a 38° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 106 mm, and stated 68% vertical accuracy is 138 mm. For more information, see the corrected survey file R051908A.cor in RID 8182.

Old Orchard Well— The original well location of 35.97252863, -115.89990810, mp elevation of 2612.77 ft, stickup of 1.50 ft above ground level, has been replaced with a more accurate updated location of 35.972534545,

-115.899926238 (NAD83 (Conus)), mp elevation of 2609.08 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.03 ft above ground level. The offset used is 0.12 ft, with a 271° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 125 mm. For more information, see the corrected survey file R032910B.cor in RID 8182.

<u>Squaw Valley Well</u>– The original well location of 36.10439189, -115.94897280 mp elevation of 2666.73 ft, stickup of 1.00 ft above ground level, has been replaced with a more accurate updated location of 36.104397686,

-115.948983489 (NAD83 (Conus)), mp elevation of 2668.66 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.93 ft above ground level. The offset used is -0.05 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 94 mm, and stated 68% vertical accuracy is 125 mm. For more information, see the corrected survey file R060915A.cor in RID 8182.

<u>Stewart Valley South</u> – The location of this well was only approximately located using a WAAS enabled handheld GPS unit as 36.17860000, -116.12893000, mp elevation of 2473.00 ft, stickup of 1.87 ft above ground level, and was recently relocated, using a resource grade GPS, with the correct location as 36.178569048, -116.128919786 (NAD83 (Conus)), mp elevation of 2476.56 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.18 ft above ground level. The

offset used is -0.05 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 87 mm. For more information, see the corrected survey file R072814B.cor in RID 8182.

<u>Susan Moore</u>— The original well location of 36.22738300, -116.03935190, mp elevation of 2594.45 ft, stickup of 0.35 ft above ground level, has been replaced with a more accurate updated location of 36.227416535, -116.039392142 (NAD83 (Conus)), mp elevation of 2571.10 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.42 ft above ground level. The offset used is -1.49 ft vertically. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 95 mm, and stated 68% vertical accuracy is 94 mm. For more information, see the corrected survey file R060814A.cor in RID 8182.

The following wells were resurveyed using a resource grade GPS unit (Trimble Geo XH with Trimble H-Star™ technology) which has a stated accuracy of 10 cm / 4 inches after post processing, and a vertical accuracy about 2 to 3 times the horizontal stated accuracy after post processing. This is much better than the older Trimble GPS unit (Trimble Pathfinder Pro XRS providing real time submeter accuracy using OmniSTAR capabilities) used to originally survey the NWRPO private well locations and measurement point elevations.

Anake —The original well location of 36.55400165, -116.59239190, mp elevation of 2355.46 ft, stickup of 2.15 ft above ground level, has been replaced with a more accurate updated location of 36.554006245, -116.592404937 (NAD83 (Conus)), mp elevation of 2352.98 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.12 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 92 mm. For more information, see the corrected survey fileR060215B.cor in RID 8182.

AW01–The original well location of 36.15546532, -115.99320398, mp elevation of 2623.78 ft, stickup of 0.92 ft above ground level, has been replaced with a more accurate updated location of 36.155474227, -115.993216632 (NAD83 (Conus), mp elevation of 2622.14 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.09 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 86 mm, and stated 68% vertical accuracy is 99 mm. For more information, see the corrected survey file R060307A.cor in RID 8182.

AW07–The original well location of 36.28504542, -116.05224088, mp elevation of 2581.72 ft, stickup of 0.98 ft above ground level, has been replaced with a more accurate updated location of 36.285060631, -116.05225351 (NAD83 (Conus)), mp elevation of 2585.78 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.14 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 84 mm. For more information, see the corrected survey file R072714B.cor in RID 8182.

AW11—The original well location of 36.27105991, -116.00811211, mp elevation of 2624.70 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.271069838, -116.008126552 (NAD83 (Conus)), mp elevation of 2628.90 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.00 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 88 mm, and stated 68% vertical accuracy is 106 mm. For more information, see the corrected survey file R051907B.cor in RID 8182.

AW24—The original well location of 36.20507408, -116.03437213, mp elevation of 2574.82 ft, stickup of 0.67 ft above ground level, has been replaced with a more accurate updated location of 36.205088179, -116.034402661 (NAD83 (Conus)), mp elevation of 2576.23 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.09 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 83 mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R072814A.cor in RID 8182.

AW34—The original well location of 36.26328392, -115.96438383, mp elevation of 3069.47 ft, stickup of 2.21 ft above ground level, has been replaced with a more accurate updated location of 36.263296428, -115.96441084 (NAD83 (Conus)), mp elevation of 3073.59 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.19 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 91 mm, and stated 68% vertical accuracy is 147 mm. For more information, see the corrected survey file R052007B.cor in RID 8182.

AW35—The original well location of 36.25263496, -115.96027180, mp elevation of 3089.97 ft, stickup of 1.75 ft above ground level, has been replaced with a more accurate updated location of 36.252638544, -115.960299111 (NAD83 (Conus)), mp elevation of 3095.06 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.90 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 99 mm, and stated 68% vertical accuracy is 116 mm. For more information, see the corrected survey file R052408A.cor in RID 8182.

AW37 (Tiberti) –The original well location of 36.23509839, - 115.99530246 mp elevation of 2652.89 ft, stickup of 1.09 ft above ground level, has been replaced with a more accurate updated location of 36.235094509, -115.99533139 (NAD83 (Conus)), mp elevation of 2655.05 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.85 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 80 mm, and stated 68% vertical accuracy is 82 mm. For more information, see the corrected survey file R080214A.cor in RID 8182

AW63—The original well location of 36.14619322, -115.97285716, mp elevation of 2642.98 ft, stickup of 2.40 ft above ground level, has been replaced with a more accurate updated location of 36.146205209, -115.972880525 (NAD83 (Conus)), mp elevation of 2645.69 ft (NAD 83-Geiod09, US Survey Feet) stickup of 2.42 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 83 mm, and stated 68% vertical accuracy is 100 mm. For more information, see the corrected survey file R032909A.cor in RID 8182.

AW64—The original well location of 36.14606442, -115.98861827, mp elevation of 2617.37 ft, stickup of 0.94 ft above ground level, has been replaced with a more accurate updated location of 36.146076505 , -115.988648018 (NAD83(Conus)), mp elevation of 2623.89 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.44 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 89 mm, and stated 68% vertical accuracy is 98 mm. For more information, see the corrected survey file R060307B.cor in RID 8182.

AW66—The original well location of 36.13888787, -115.97072930, mp elevation of 2644.46 ft, stickup of 0.90 ft above ground level, has been replaced with a more accurate updated location of 36.138899894, -115.970751461, (NAD83 (Conus)), mp elevation of 2646.94 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.89 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 79 mm, and stated 68% vertical accuracy is 81 mm. For more information, see the corrected survey file R081114A.cor in RID 8182.

<u>Basin Station</u>—The original well location of 36.21992820, -116.04959140, mp elevation of 2556.16 ft, stickup of 0.75 ft above ground level, has been replaced with a more accurate updated location of 36.219935803, -116.049602864 (NAD83 (Conus)), mp elevation of 2561.43ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.72 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 82 mm. For more information, see the corrected survey file R080214B.cor in RID 8182.

Bathtub Well—The original well location of 36.32893689, -116.03401240, mp elevation of 2707.23 ft, stickup of 2.15 ft above ground level, has been replaced with a more accurate updated location of 36.328939758, -116.034024113 (NAD83 (Conus)), mp elevation of 2702.71 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.10 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R072713A.cor in RID 8182.

<u>Big South</u>—The original well location of 36.06546274, -115.97448510, mp elevation of 2546.72 ft, stickup of 1.00 ft above ground level, has been replaced with a more accurate updated location of 36.065476195, -115.974506487 (NAD83 (Conus)), mp elevation of 2549.10 ft (NAD 83-Geiod09, US Survey Feet) stickup of 1.08 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 108 mm. For more information, see the corrected survey file R060316A.cor in RID 8182.

Blagg Spring—The original well location of 36.20467077, -116.01441550, mp elevation of 2599.17ft, stickup of 1.00 ft above ground level, has been replaced with a more accurate updated location of 36.204686094, -116.014423868 (NAD83 (Conus)), mp elevation of 2594.90 ft (NAD 83-Geiod09, US Survey Feet) stickup of 0.30 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 115 mm, and stated 68% vertical accuracy is 148 mm. For more information, see the corrected survey file R060807A.cor in RID 8182.

Burnout—The original well location of 36.25858882, -116.00294780, mp elevation of 2642.71 ft, stickup of 0.80 ft above ground level, has been replaced with a more accurate updated location of 36.258586372, -116.00295004 (NAD83 (Conus)), mp elevation of 2642.23 ft (NAD 83-Geiod09, US Survey Feet) stickup of 0.83 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 94 mm, and stated 68% vertical accuracy is 120 mm. For more information, see the corrected survey file R052407A.cor in RID 8182.

<u>CAAS Well</u>—The original well location of 36.15084985, -115.89715730, mp elevation of 2828.12 ft, stickup of 1.15 ft above ground level, has been replaced with a more accurate updated location of 36.150855505, -115.897174339 (NAD83 (Conus)), mp elevation of 2823.15 ft (NAD 83-Geiod09, US Survey Feet) stickup of 1.13 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 80 mm, and stated 68% vertical accuracy is 84 mm. For more information, see the corrected survey file R080213A.cor in RID 8182.

<u>Donna</u>—The original well location of 36.13792894, -115.98706020 mp elevation of 2629.97 ft, stickup of 0.39 ft above ground level, has been replaced with a more accurate updated location of 36.137986287, -115.987085102 (NAD83 (Conus)), mp elevation of 2621.11 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.43 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 111 mm. For more information, see the corrected survey fileR060815A.cor in RID 8182.

<u>Dry Lakebed Well</u>—The original well location of 36.00166706, -115.97047490, mp elevation of 2523.82 ft, stickup of 1.60 ft above ground level, has been replaced with a more accurate updated location of 36.001664793, -115.970475313 (NAD83 (Conus)), mp elevation of 2527.64 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.66 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 108 mm. For more information, see the corrected survey file R032910A.cor in RID 8182.

Executive Golf Course—The original well location of 36.19320156, -115.98676010, mp elevation of 2640.81 ft, stickup of 1.46 ft above ground level, has been replaced with a more accurate updated location of 36.178762515, -115.986774939 (NAD83 (Conus)), mp elevation of 2641.46 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.23 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 115 mm. For more information, see the corrected survey file R032908B.cor in RID 8182.

Forum Group—The original well location of 36.19320156, -116.05784520, mp elevation of 2558.17 ft, stickup of 2.30 ft above ground level, has been replaced with a more accurate updated location of 36.193205606, -116.057845339 (NAD83 (Conus)), mp elevation of 2554.00 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.22 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 80 mm, and stated 68% vertical accuracy is 83 mm. For more information, see the corrected survey file R052507A.cor in RID 8182.

Franklin Dry-The original well location of 36.42527811, -116.46342720, mp elevation of 2193.04 ft, stickup of 1.50 ft above ground level, has been replaced with a more accurate updated location of 36.425280391, -116.463438251 (NAD83 (Conus)), mp elevation of 2192.27 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.57 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 83 mm, and stated 68% vertical accuracy is 90 mm. For more information, see the corrected survey file R060115A.cor in RID 8182.

Gauging Station (USGS) –The original well location of 36.59041112, -116.59183500, mp elevation of 2392.18 ft, stickup of 1.14 ft above ground level, has been replaced with a more accurate updated location of 36.590429181, -116.591864363 (NAD83 (Conus)), mp elevation of 2396.10 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.25 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 101 mm. For more information, see the corrected survey file R031711A.cor in RID 8182.

<u>Gravel Pit</u>—The original well location of 36.17526877, -115.91884750, mp elevation of 2831.71 ft, stickup of 1.25 ft above ground level, has been replaced with a more accurate updated location of 36.175273009, -115.918850801 (NAD83 (Conus)), mp elevation of 2832.69 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.80 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 90 mm. For more information, see the corrected survey file R072011A.cor in RID 8182.

<u>Harley</u>—The original well location of 36.34936556, -116.03217454, mp elevation of 2902.87 ft, stickup of 1.72 ft above ground level, has been replaced with a more accurate updated location of 36.34939602, -116.03217486 (NAD83 (Conus)), mp elevation of 2909.36 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.80 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 99 mm, and stated 68% vertical accuracy is 134 mm. For more information, see the corrected survey file R052008A.cor in RID 8182.

<u>Irene Fan</u>-The original well location of 36.22887164, -115.98772110, mp elevation of 2712.08 ft, stickup of 1.50 ft above ground level, has been replaced with a more accurate updated location of 36.228880119, -115.987725836 (NAD83 (Conus)), mp elevation of 2706.91 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.50 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 86 mm, and stated 68% vertical accuracy is 98 mm. For more information, see the corrected survey file R051907A.cor in RID 8182.

<u>Jeep Trail Well</u>—The original well location of 36.00478569, -115.76801820, mp elevation of 3049.02 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.004794833, -115.768038296 (NAD83 (Conus)), mp elevation of 3051.29 ft (NAD 83-Geiod09, US Survey Feet), stickup of -0.09 ft below ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 81 mm, and stated 68% vertical accuracy is 109 mm. For more information, see the corrected survey file R032911A.cor in RID 8182.

<u>Last Chance Well</u>—The original well location of 36.35318374, -116.11686102, mp elevation of 3089.74 ft, stickup of 2.55 ft above ground level, has been replaced with a more accurate updated location of 36.353191236, -116.11687437 (NAD83 (Conus)), mp elevation of 3086.03 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.93 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 79 mm, and stated 68% vertical accuracy is 90 mm. For more information, see the corrected survey file R080314A.cor in RID 8182.

McDonalds Horse Farm—The original well location of 36.22470896, -116.08661070, mp elevation of 2533.13 ft, stickup of 1.50 ft above ground level, has been replaced with a more accurate updated location of 36.22470727, -116.086619549 (NAD83 (Conus)), mp elevation of 2542.33 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.59 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 84 mm, and stated 68% vertical accuracy is 87 mm. For more information, see the corrected survey file R072716A.cor in RID 8182.

Mound Spring—The original well location of 36.08748878, -115.91230090, mp elevation of 2774.70 ft, stickup of 0.60 ft above ground level, has been replaced with a more accurate updated location of 36.087493508, -115.912310109 (NAD83 (Conus)), mp elevation of 2774.15 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.45 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 84 mm, and stated 68% vertical accuracy is 90 mm. For more information, see the corrected survey file R072916A.cor in RID 8182

NDOT—The original well location of 36.07490066, - 115.77287190, mp elevation of 3376.67 ft, stickup of 0.85 ft above ground level, has been replaced with a more accurate updated location of 36.074907916, -115.772884193 (NAD83 (Conus)), mp elevation of 3371.48 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.98 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 125 mm, and stated 68% vertical accuracy is 122 mm. For more information, see the corrected survey file R060314A.cor in RID 8182.

Old Spanish Trail—The original well location of 36.10008510, -115.91756890, mp elevation of 2742.26 ft, stickup of 1.55 ft above ground level, has been replaced with a more accurate updated location of 36.100094391, -115.917576289 (NAD83 (Conus)), mp elevation of 2743.23 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.51 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 83 mm, and stated 68% vertical accuracy is 87 mm. For more information, see the corrected survey file R072915B.cor in RID 8182.

Old Time—The original well location of 36.07779326, -115.90784260, mp elevation of 2791.84 ft, stickup of 1.75 ft above ground level, has been replaced with a more accurate updated location of 36.077798882, -115.907857579 (NAD83 (Conus)), mp elevation of 2784.71 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.78 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 91 mm, and stated 68% vertical accuracy is 100 mm. For more information, see the corrected survey file R060107A.cor in RID 8182.

<u>Our Bar</u>—The original well location of 36.26415028,-116.08066771, mp elevation of 2565.44 ft, stickup of 0.77 ft above ground level, has been replaced with a more accurate updated location of 36.264153235, -116.080697924 (NAD83 (Conus)), mp elevation of 2569.99 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.80 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 83 mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R072715A.cor in RID 8182.

<u>Power 04</u>—The original well location of 36.55622490, -116.49623655, mp elevation of 2373.90 ft, stickup of 0.65 ft above ground level, has been replaced with a more accurate updated location of 36.556235449, -116.496253049 (NAD83 (Conus)), mp elevation of 2374.68 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.64 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 88 mm, and stated 68% vertical accuracy is 86 mm. For more information, see the corrected survey file R060214A.cor in RID 8182.

Quail Well—The original well location of 35.97241467, -115.88252690, mp elevation of 2637.81 ft, stickup of 1.00 ft above ground level, has been replaced with a more accurate updated location of 35.972409346, -115.88254313 (NAD83 (Conus)), mp elevation of 2635.32 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.25 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 108 mm, and stated 68% vertical accuracy is 143 mm. For more information, see the corrected survey file R060315C.cor in RID 8182.

Quarterhorse —The original well location of 36.09599396, -115.93935720 ,mp elevation of 2675.45 ft, stickup of 1.60 ft above ground level, has been replaced with a more accurate updated location of 36.09599763, -115.939375543 (NAD83 (Conus)), mp elevation of 2673.29 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.45 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 116 mm. For more information, see the corrected survey file R060316B.cor in RID 8182.

Roadhouse—The original well location of 36.30095920, -116.00595330, mp elevation of 2659.77 ft, stickup of 0.30 ft above ground level, has been replaced with a more accurate updated location of 36.300967912, -116.005965746 (NAD83 (Conus)), mp elevation of 2661.20 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.40 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 88 mm, and stated 68% vertical accuracy is 139 mm. For more information, see the corrected survey file R052007A.cor in RID 8182.

Ruins Well—The original well location of 36.22874022, -116.06885580, mp elevation of 2547.77 ft, stickup of 0.80 ft above ground level, has been replaced with a more accurate updated location of 36.228754771, -116.068873584 (NAD83 (Conus)), mp elevation of 2552.14 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.82 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 87 mm, and stated 68% vertical accuracy is 106 mm. For more information, see the corrected survey file R052508C.cor in RID 8182.

<u>Sedgewick</u>—The original well location of 36.56077526, -116.50993999, mp elevation of 2376.13 ft, stickup of 1.56 ft above ground level, has been replaced with a more accurate updated location of 36.560761808, -116.50997381 (NAD83 (Conus)), mp elevation of 2377.08 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.60 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 140 mm, and stated 68% vertical accuracy is 139 mm. For more information, see the corrected survey file R060215A.cor in RID 8182.

Stateline—The original well location of 35.97240427,-115.85756901, mp elevation of 2683.06 ft, stickup of 0.20 ft above ground level, has been replaced with a more accurate updated location of 35.97240557, -115.857589597 (NAD83 (Conus)), mp elevation of 2690.89 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.75 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 126 mm, and stated 68% vertical accuracy is 139 mm. For more information, see the corrected survey file R060315B.cor in RID 8182.

Stewart Valley Vacant—The original well location of 36.23196879, -116.15730820, mp elevation of 2469.81 ft, stickup of 0.50 ft above ground level, has been replaced with a more accurate updated location of 36.231973655, -116.157319181 (NAD83 (Conus)), mp elevation of 2469.55 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.48 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 110 mm, and stated 68% vertical accuracy is 146 mm. For more information, see the corrected survey file R060407A.cor in RID 8182.

Stirrup—The original well location of 36.16558967, -116.00993620, mp elevation of 2598.41 ft, stickup of 0.00 ft above ground level, has been replaced with a more accurate updated location of 36.165582056, -116.009940536 (NAD83 (Conus)), mp elevation of 2598.18 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.63 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 84 mm, and stated 68% vertical accuracy is 86 mm. For more information, see the corrected survey file R072915A.cor in RID 8182.

West 372 Fan Well—The original well location of 36.17592470, -116.08909390, mp elevation of 2516.75 ft, stickup of 0.60 ft above ground level, has been replaced with a more accurate updated location of 36.175925507, -116.089105236 (NAD83 (Conus)), mp elevation of 2517.29 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.84 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 80 mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R052508A.cor in RID 8182.

West Basin Fan Well—The original well location of 36.22060934, -116.10898250 mp elevation of 2554.72 ft, stickup of 2.35 ft above ground level, has been replaced with a more accurate updated location of 36.220611948, -116.108997666 (NAD83 (Conus)), mp elevation of 2554.80 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.46 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 80

mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R052508B.cor in RID 8182.

West Flamingo Fan Well—The original well location of 36.18980928, -116.10742170 mp elevation of 2527.61 ft, stickup of 1.10 ft above ground level, has been replaced with a more accurate updated location of 36.189803803, -116.107433872 (NAD83 (Conus)), mp elevation of 2526.14 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.01 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 84 mm, and stated 68% vertical accuracy is 89 mm. For more information, see the corrected survey file R072716B.cor in RID 8182.

West Mesquite—The original well location of 36.24984312, -116.08906240 mp elevation of 2570.89 ft, stickup of 0.76 ft above ground level, has been replaced with a more accurate updated location of 36.249848324, -116.089078654 (NAD83 (Conus)), mp elevation of 2572.82 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.63 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 92 mm, and stated 68% vertical accuracy is 136 mm. For more information, see the corrected survey file R052509A.cor in RID 8182.

The following wells were added to the WLMP after 9/30/07, and the original surveys were made using a resource grade GPS unit (Trimble Geo XH with Trimble H-Star™ technology):

<u>Aeropark-</u> The GPSed location for this well is 36.640058339, -116.409740465 (NAD83 (Conus)), mp elevation of 2639.66 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.03 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 113 mm. For more information, see the corrected survey file R031612A.cor in RID 8182.

<u>AVSTP-</u> The GPSed location for this well is 36.644826305, -116.385098691 (NAD83 (Conus)), mp elevation of 2675.44 ft (NAD 83-Geiod09, US Survey Feet), stickup of 2.15 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 82 mm, and stated 68% vertical accuracy is 86 mm. For more information, see the corrected survey file R010715A.cor in RID 8182.

<u>Landfill # 1-</u> The GPSed location for this well is 36.246290801, -115.986312309 (NAD83 (Conus)), mp elevation of 2770.64 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.00 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 85 mm, and stated 68% vertical accuracy is 93 mm. For more information, see the corrected survey file R022410A.cor in RID 8182.

<u>Landfill # 2-</u> The GPSed location for this well is 36.246173586, -115.987007922 (NAD83 (Conus)), mp elevation of 2766.04 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.55 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 70 mm, and stated 68% vertical accuracy is 86 mm. For more information, see the corrected survey file R022410A.cor in RID 8182

<u>Landfill # 3-</u> The GPSed location for this well is 36.245693417, -115.987316124 (NAD83 (Conus)), mp elevation of 2760.86 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.74 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 71 mm, and stated 68% vertical accuracy is 78 mm. For more information, see the corrected survey file R022410A.cor in RID 8182.

<u>Pit Wall-</u> The GPSed location for this well is 36.313322376, -116.327337647 NAD83 (Conus), mp elevation of 2225.32 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.14 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 103 mm, and stated 68% vertical accuracy is 138 mm. For more information, see the corrected survey file R011113A.cor in RID 8182.

Ruby's Store Well-The GPSed location for this well is 36.493066849, -116.422826100 (NAD83 (Conus)), mp elevation of 2277.05 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.87 ft above ground level. The offset used is 12.10 ft, with a 264° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 83 mm, and stated 68% vertical accuracy is 85 mm. For more information, see the corrected survey file R022312A.cor in RID 8182.

The following wells were reactivated prior to the current revision 7629.02 (3/2015) of this RID but after revision 7629.01 (11/2010). Well locations were updated using a resource grade Trimble Geo XH GPS unit.

AW28 –The original well location of 36.23482204, -116.0664292 mp elevation of 2555.29 ft, stickup of 1.71 ft above ground level, has been replaced with a more accurate updated location of 36.234823081, -116.066455627 (NAD83 (Conus)), mp elevation of 2555.06 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.71 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 113 mm, and stated 68% vertical accuracy is 164 mm. For more information, see the corrected survey file R061309A.cor in RID 8182.

Gilligan Domestic (AD-9a) –The original well location of 36.4769555, -116.4477623 mp elevation of 2263.03 ft, stickup of 0.66 ft above ground level, has been replaced with a more accurate updated location of 36.476962455, -116.447775992 (NAD83 (Conus)), mp elevation of 2260.62 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.40 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 119 mm, and stated 68% vertical accuracy is 163 mm. For more information, see the corrected survey file R051415B.cor in RID 8182.

<u>Hall2</u> –The original well location of 36.25565581, -116.04474824 mp elevation of 2572.70 ft, stickup of 1.36 ft above ground level, has been replaced with a more accurate updated location of 36.255664815, -116.044776947 (NAD83 (Conus)), mp elevation of 2572.43 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.36 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 99 mm, and stated 68% vertical accuracy is 165 mm. For more information, see the corrected survey file R010811A.cor in RID 8182.

<u>Henry</u>— The original well location of 36.53875316, -116.4834619, mp elevation of 2354.50 ft, stickup of 1.54 ft above ground level, has been replaced with a more accurate updated location of 36.538756944, -116.483468678 (NAD83 (Conus)), mp elevation of 2358.05 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.54 ft above ground level. The offset used is 12.05 ft, with a 333° azimuth. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 110 mm, and stated 68% vertical accuracy is 153 mm. For more information, see the corrected survey file R051411A.cor in RID 8182.

<u>Slack</u> –The original well location of 36.48896078, -116.48640612 mp elevation of 2285.85 ft, stickup of 1.49 ft above ground level, has been replaced with a more accurate updated location of 336.488961481, -116.486416452 (NAD83 (Conus)), mp elevation of 2281.92 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.49 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 101 mm, and stated 68% vertical accuracy is 152 mm. For more information, see the corrected survey file R051413A.cor in RID 8182.

<u>Utilities 1</u> – The original well location of 36.19104779, -115.9709496, mp elevation of 2692.28 ft, stickup of 0.75 ft above ground level, has been replaced with a more accurate updated location of 36.191050562, -115.970957498 (NAD83 (Conus)), mp elevation of 2691.72 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.68 ft above ground level. The offset used is 3.71 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 139 mm, and stated 68% vertical accuracy is 189 mm. For more information, see the corrected survey file R122211A.cor in RID 8182.

<u>Utilities 2</u>— The original well location of 36.18815778, -115.9658529, mp elevation of 2708.23 ft, stickup of 0.09 ft above ground level, has been replaced with a more accurate updated location of 36.188158092, -115.965868154 (NAD83 (Conus)), mp elevation of 2706.78 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.69 ft above ground level. The offset used is 1.42 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 125 mm, and stated 68% vertical accuracy is 154 mm. For more information, see the corrected survey file R122312A.cor in RID 8182.

<u>Utilities 9</u> – The original well location of 36.20374957, -115.9836673, mp elevation of 2680.56 ft, stickup of 1.95 ft above ground level, has been replaced with a more accurate updated location of 36.203754261, -115.983683638 (NAD83 (Conus)), mp elevation of 2679.20 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.70 ft above ground level. The offset used is 3.65 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 105 mm, and stated 68% vertical accuracy is 137 mm. For more information, see the corrected survey file R122308B.cor in RID 8182.

<u>Utilities 11</u> – The original well location of 36.20633552, -115.9852493, mp elevation of 2678.23 ft, stickup of 1.50 ft above ground level, has been replaced with a more accurate updated location of 36.206340338, -115.985261966 (NAD83 (Conus)), mp elevation of 2678.15 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.41 ft above ground level. The offset used is 4.18 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 117 mm, and stated 68% vertical accuracy is 195 mm. For more information, see the corrected survey file R122214A.cor in RID 8182.

<u>Utilities CM1</u> – The original well location of 36.26893215, -115.9955989, mp elevation of 2687.96 ft, stickup of 0.60 ft above ground level, has been replaced with a more accurate updated location of 36.268981796, -115.995619481 (NAD83 (Conus)), mp elevation of 2693.07 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.61 ft above ground level. The offset used is 3.44 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 116 mm, and stated 68% vertical accuracy is 165 mm. For more information, see the corrected survey file R122310A.cor in RID 8182.

<u>Utilities CVE48#1</u>— The original well location of 36.30757339, -115.9965707, mp elevation of 2775.14 ft, stickup of 1.83 ft above ground level, has been replaced with a more accurate updated location of 36.307451446, -115.996593368 (NAD83 (Conus)), mp elevation of 2771.31 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.80 ft above ground level. The offset used is 2.82 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 108 mm, and stated 68% vertical accuracy is 210 mm. For more information, see the corrected survey file R122311A.cor in RID 8182.

<u>Utilities Mtn View Estates</u>— The original well location of 36.20465257, -116.033555, mp elevation of 2568.74 ft, stickup of 1.29 ft above ground level, has been replaced with a more accurate updated location of 36.204645049, -116.033560439 (NAD83 (Conus)), mp elevation of 2577.21 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.31 ft above ground level. The offset used is 2.76 ft, with a -90° inclination. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is108 mm, and stated 68% vertical accuracy is 173 mm. For more information, see the corrected survey file R010813A.cor in RID 8182

The following wells were re-GPSed prior to the current revision 7629.02 (3/2015) of this RID but after revision 7629.01 (11/2010). Well locations were updated because of poor accuracies discovered during reprocessing of original files (2014) using Trimble® Pathfinder® Office version 5.60 (see RID 8182).

Stateline—The original well location of 35.972403964, -115.857591685 mp elevation of 2690.09 ft, stickup of 0.75 ft above ground level, has been replaced with a more accurate updated location of 35.97240557, -115.857589597 (NAD83 (Conus)), mp elevation of 2690.89 ft (NAD 83-Geiod09, US Survey Feet), stickup of 0.75 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 114 mm, and stated 68% vertical accuracy is 154 mm. For more information, see the corrected survey file R052509A.cor in RID 8182

<u>Harrow Disk</u>—The original well location of 36.264280294, -116.004141157 mp elevation of 2635.13 ft, stickup of 1.02 ft above ground level, has been replaced with a more accurate updated location of 36.264279485, -116.00414059 (NAD83 (Conus)), mp elevation of 2635.27 ft (NAD 83-Geiod09, US Survey Feet), stickup of 1.02 ft above ground level. The Pathfinder® Office post processed stated 68% horizontal accuracy for this data set is 111 mm, and stated 68% vertical accuracy is 185 mm. For more information, see the corrected survey file R052509A.cor in RID 8182

During one of Nye County's routine semiannual field sounder standardization procedures performed on January 31, 2007, sounder NC #1 failed to standardize in well 7S. The standardization procedure is outlined in TP-9.9, *Measurement of Groundwater Levels Using Electric Well Sounders*, section 5.1.1. The procedure states, "The field electric sounder shall be considered successfully standardized if it produces a water level that deviates from the master sounder level by less than 0.1 feet for every 100 feet measured." Applying this condition to well 7S, where Nye County's master sounder NC #6 measured the depth-to-water on this date at 24.72 feet, would have required an electric well sounder to measure the depth-to-water in the range of 24.70 to 24.74 feet. Sounder NC #1 measured the depth-to-water as 24.75 feet, failing standardization by 0.01 ft. However, sounder NC #1 did standardize in both deeper wells of 179.75 ft (1DX Deep) and 498.31 ft (16P), as measured by master sounder NC #6. For the subsequent standardization procedures performed on April 19, 2007, April 20, 2007, October 31, 2007, and April 21, 2008, sounder NC #1 passed standardization in all wells including well 7S. Sounder NC #1 again failed standardization in well 7S (by 0.01 ft), but passed in all other wells on October 15, 2008.

A joint USGS-Nye County corroboration/standardization took place on April 21, 2008 in which all Nye County sounders, including master sounder NC #6, were standardized against the USGS calibrated sounder. Measurements were performed both by the USGS and Nye County in EWDP wells 16P, 18P, 1DX Deep, and 7S. Wells were first measured using the USGS steel reference tape, followed by all of the Nye County sounders, and then finally remeasured with the USGS steel reference tape. All Nye County sounders (NC #1, NC #5, master sounder NC #6, NC #7, NC #8, NC #9, and NC #10) passed corroboration (standardization with respect to the USGS steel reference tape) in wells 16P, 18P, and 1DX Deep. All sounders also passed standardization with respect to master sounder NC #6 in the above mentioned wells. However, in well 7S, sounders NC #1 and NC #9 passed standardization with respect to master sounder NC #6, but did not pass corroboration. The USGS steel reference tape measured the depth-to-water at 24.51 ft for both the opening and closing reading. Sounder NC #1 measured the depth-to-water in the same well at 24.55 ft (out of corroboration by 0.02 ft), and NC #9 measured the depth-to-water in the same well at 24.54 ft (out of corroboration by 0.01 ft). As mentioned above, both sounder NC #1 and NC #9 did pass standardization with respect to the Nye County master sounder NC #6, which measured the depth-to-water in well 7S at 24.53 ft. Even though the USGS steel reference tape varied by 0.03 ft between the opening and closing measurements for well 1DX Deep (171.71 ft, and 179.69 ft), it was only after the USGS technician removed the weights from the bottom of the steel reference tape that the readings were in acceptable agreement with Nye County's master sounder NC #6 (which incidentally had a variation of only 0.03 ft between itself and all other Nye County sounders being standardized). The function of these weights is to ensure that the measurement tape hangs straight in the well so that accurate water level measurements can be taken. Similarly, the USGS steel reference tape varied by 0.02 ft between the opening and closing measurements for well 18P (779.18 ft, and 779.16 ft). Based on analysis of data and observations regarding the performance of the USGS steel reference tape, Nye County will seek an alternate "standard" to compare the Nye County master sounder NC #6 against.

All the hydrographs of wells that were measured using sounder NC #1 from the failed January 31, 2007 standardization to November 15, 2008, were reviewed in order to identify any offsets that would indicate erroneous sounder measurements. This consisted of 37 measurements in 12 wells with a depth-to-water of 50 feet or less. No offsets were identified in these hydrographs, suggesting that the data collected with sounder NC #1 during this period of time are still valid. Similarly the hydrographs of wells that were measured using sounder NC #9 from the failed April 21, 2008 corroboration to November 15, 2008, were looked at. This consisted of 30 measurements in 8 wells with a depth-to-water of 50 feet or less. Again, no offsets were identified in these hydrographs, which supports the conclusion that the data collected with sounder NC #9 during the period of time in question are still valid. However, as a precautionary measure since both sounder NC #1 and sounder NC #9 did not pass corroboration on April 21, 2008, both have been taken out of service effective November 15, 2008.

According to TP-9.9 section 5.4, "Uncertainty attached to the acquisition of water levels includes the variability in sounder tapes, well construction characteristics, the nature of the water-bearing unit (i.e., confined versus unconfined), and the skill and judgment of the individual taking the measurements." In particular it is believed that the physical properties and/or the construction characteristics of well 7S may contribute to the slight variability in readings noted when taking depth-to-water measurements. Furthermore the use of well 7S for standardizing sounders with a 500 foot long tape (or any sounder with a tape longer than approximately 30 feet) is not recommended and deviates from the directive in section 5.1.1 which states, "The measurements shall be made in a well deep enough to accommodate the maximum length of sounder measurement tape possible." Therefore, well 7S will no longer be used to standardize sounders.

The tables in the metadata attachment show all 181 measurements taken in Private wells with sounder NC #1 after it failed to standardize on January 31, 2007, and all 100 measurements taken in Private wells with sounder NC #9 after it failed corroboration on April 21, 2008.